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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/724,740	11/28/2000	James J. Carrig	80398.P386	8425

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EXAMINER

AN, SHAWN S

ART UNIT PAPER NUMBER

2613

DATE MAILED: 12/19/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/724,740

Applicant
James Carrig

Examiner
Shawn An

Art Unit
2613



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on Nov 28, 2000 is/are a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 2 6) ☐ Other:

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DETAILED ACTION

Claim Objections

1. Claims 3, 8, and 13 are objected to because of the following informalities: On claims 3, 8, and 13, "a transform" should be changed to "an inverse transform". Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-4 and 6-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Jeon et al (5,937,101).

Regarding claims 1-2 and 6-7, Jeon et al discloses an apparatus/method, comprising:

means for receiving a block of transform domain coefficients (Fig. 2, QF (u,v)) and corresponding error flags (Fig. 8, Adjust Factor);

means for estimating an initial (expected) value for each erroneous (lost or damaged) coefficients (col. 6, lines 46-59; col. 9, lines 54-55);

means for decoding pixel values of the block (Fig. 2, 22 and 23), using the initial value of the coefficients (abs.).

means for updating the value for each erroneous coefficient (Fig. 8, 31); and

means for updating pixel values of the block (Fig. 8, 34) using the updated values of the coefficients (col. 8, lines 5-8 and lines 59-64).

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Regarding claims 3 and 8, Jeon et al discloses applying the transform domain coefficients to a transform (Fig. 2, 23).

Regarding claims 4 and 9, Jeon et al discloses minimizing a least square equation (col. 7, eq. 17).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 5 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jeon et al (5,937,101).

Regarding claims 5 and 10, Jeon et al does not specifically disclose means for displaying the updated pixel values.

However, a display device displaying decoded pixel values are well known in the art. Furthermore, it is considered quite obvious for a conventional decoder to decode the encoded/compressed video image data including the updated pixel values so as to display decoded video image data.

Therefore, it would have been considered to a person of ordinary skill in the relevant art employing a decoding apparatus/method, as taught by Jeon et al to incorporate the well known conventional display device so as to display the decoded video image data including the updated pixel values.

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6. Claims 11-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jeon et al (5,937,101) in view of Florencio et al (6,373,894 B1).

Regarding claims 11-12, Jeon et al discloses a method, comprising:

receiving a block of transform domain coefficients (Fig. 2, QF (u,v)) and corresponding error flags (Fig. 8, Adjust Factor);

estimating an initial (expected) value for each erroneous (lost or damaged) coefficients (col. 6, lines 46-59; col. 9, lines 54-55);

decoding pixel values of the block (Fig. 2, 22 and 23), using the initial value of the coefficients (abs.).

updating the value for each erroneous coefficient (Fig. 8, 31); and

updating pixel values of the block (Fig. 8, 34) using the updated values of the coefficients (col. 8, lines 5-8 and lines 59-64).

Jeon et al does not particularly disclose a computer readable medium having instructions.

However, a computer readable medium (software/program) is well known in the art.

Furthermore, Florencio et al teaches method and apparatus for recovering quantized coefficients including a decoder that can be represented by a computer readable medium having instructions (Fig. 4; col. 8, lines 19-28).

Therefore, it would have been considered obvious to a person of ordinary skill in the relevant art employing a decoding apparatus/method as taught by Jeon et al to incorporate the concept of a decoder that can be represented by a computer readable medium having instructions which, when executed by a processing system (Fig. 4, 410), cause the system to perform methods as taught by Jeon et al so as to be portable and cost effective.

Regarding claim 13, Jeon et al discloses applying the transform domain coefficients to a transform (Fig. 2, 23).

Regarding claim 14, Jeon et al discloses minimizing a least square equation (col. 7, eq. 17).

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Regarding claim 15, Jeon et al does not specifically discloses means for displaying the updated pixel values.

However, a display device displaying decoded pixel values are well known in the art. Furthermore, it is considered quite obvious for a conventional decoder to decode the encoded/compressed video image data including the updated pixel values so as to display decoded video image data.

Therefore, it would have been obvious to a person of ordinary skill in the relevant art employing a decoding apparatus/method, as taught by Jeon et al to incorporate the well known display device so as to display the decoded video image data including the updated pixel values.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

A) Kim (5,757,969), Method for removing a blocking effect for use in a video signal decoding apparatus.

B) Florencio et al (6,125,147), Method and apparatus for reducing breathing artifacts in compressed video.

8. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-4700.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shawn An whose telephone number (703) 305-0099 and schedule are Tuesday through Friday.

SSA



SHAWN S. AN
PATENT EXAMINER

December 15, 2002